

## Paul's Online Notes

Home / Calculus I / Derivatives / The Definition of the Derivative

---

### Section 3.1 : The Definition Of The Derivative - Practice Problems

---

Use the definition of the derivative to find the derivative of the following functions.

1.  $f(x) = 6$  [Solution]

2.  $V(t) = 3 - 14t$  [Solution]

3.  $g(x) = x^2$  [Solution]

4.  $Q(t) = 10 + 5t - t^2$  [Solution]

5.  $W(z) = 4z^2 - 9z$  [Solution]

6.  $f(x) = 2x^3 - 1$  [Solution]

7.  $g(x) = x^3 - 2x^2 + x - 1$  [Solution]

8.  $R(z) = \frac{5}{z}$  [Solution]

9.  $V(t) = \frac{t+1}{t+4}$  [Solution]

10.  $Z(t) = \sqrt{3t-4}$  [Solution]

11.  $f(x) = \sqrt{1-9x}$  [Solution]